

THAT WHICH IS CLAIMED IS:

1. A method for making wallboard or backerboard sheets comprising:

forming core material having opposing first and second major surfaces and comprising aerated
5 concrete;

securing at least one face layer on at least one of the first and second major surfaces of the core material; and

10 cutting the core material and at least one face layer secured thereto into a plurality of wallboard or backerboard sheets.

2. A method according to Claim 1 further comprising curing the core material prior to securing the at least one face layer thereto.

3. A method according to Claim 1 further comprising curing the core material after securing the at least one face layer thereto.

4. A method according to Claim 1 wherein forming the core material comprises:

dispensing materials for making aerated concrete into a mold and allowing the materials to rise
5 and stiffen into a body;

curing the body; and

dividing the cured body into a plurality of cured sheets to serve as the core material.

5. A method according to Claim 4 further comprising joining a plurality of the cured sheets together in end-to-end relation while advancing the cured sheets along a path of travel.

6. A method according to Claim 5 wherein securing the at least one face layer is performed while the cured sheets are advanced along the path of travel.

7. A method according to Claim 1 wherein forming the core material comprises:

dispensing materials for making aerated concrete into a mold and allowing the materials to rise
5 and stiffen into a body;

dividing the body into a plurality of uncured sheets; and

curing the sheets to serve as the core material.

8. A method according to Claim 7 further comprising joining a plurality of the cured sheets together in end-to-end relation while advancing the cured sheets along a path of travel.

9. A method according to Claim 8 wherein securing the at least one face layer is performed while the cured sheets are advanced along the path of travel.

10. A method according to Claim 1 wherein forming the core material comprises:

dispensing materials for making aerated concrete into a mold and allowing the materials to rise
5 and stiffen into a body; and

dividing the body into a plurality of uncured sheets to serve as the core material.

11. A method according to Claim 10 further comprising curing the uncured sheets after securing the at least one face layer thereto.

12. A method according to Claim 11 wherein the curing is after cutting.

13. A method according to Claim 1 wherein forming the core material comprises mixing and dispensing the materials for making aerated concrete in slurry form.

14. A method according to Claim 13 wherein securing the at least one face layer comprises receiving the aerated concrete in slurry form thereon as the at least one face layer is advanced along a path of travel.

15. A method according to Claim 14 further comprising:

permitting the aerated concrete material to rise and stiffen prior to cutting; and
curing the aerated concrete after cutting.

16. A method according to Claim 1 securing the at least one face layer comprises securing first and second face layers on respective first and second major surfaces of the core material.

17. A method according to Claim 1 wherein the at least one face layer comprises paper.

18. A method according to Claim 1 wherein the at least one face layer is moisture-resistant.

19. A method according to Claim 1 further comprising forming the first major surface of the core material to have beveled portions adjacent respective opposing longitudinal side edges.

20. A method according to Claim 1 wherein securing the at least one face layer comprises securing the at least one face layer to extend around the opposing longitudinal side edges.

21. A method according to Claim 1 wherein forming the core material comprises forming the core material with reinforcing fibers in the aerated concrete.

22. A method for making wallboard or backerboard sheets comprising:

dispensing materials for making aerated concrete into a mold and allowing the materials to rise
5 and stiffen into a body;

curing the body;

dividing the cured body into a plurality of cured sheets to serve as core material having opposing major surfaces;

10 securing at least one face layer on at least one of the first and second major surfaces of the core material; and

cutting the core material and at least one face layer secured thereto into a plurality of wallboard
15 or backerboard sheets.

23. A method according to Claim 22 further comprising joining a plurality of the cured sheets together in end-to-end relation while advancing the cured sheets along a path of travel.

24. A method according to Claim 23 wherein securing the at least one face layer is performed while the cured sheets are advanced along the path of travel.

25. A method according to Claim 22 securing the at least one face layer comprises securing first and second face layers on respective first and second major surfaces of the core material.

26. A method according to Claim 22 wherein the at least one face layer comprises paper.

27. A method according to Claim 22 wherein the at least one face layer is moisture-resistant.

28. A method according to Claim 22 further comprising forming the first major surface of the core material to have beveled portions adjacent respective opposing longitudinal side edges.

29. A method according to Claim 22 wherein securing the at least one face layer comprises securing the at least one face layer to extend around the opposing longitudinal side edges.

30. A method according to Claim 22 further comprising adding reinforcing fibers to the aerated concrete.

31. A method for making wallboard or backerboard sheets comprising:

dispensing materials for making aerated concrete into a mold and allowing the materials to rise
5 and stiffen into a body;

dividing the body into a plurality of uncured sheets;

curing the uncured sheets to serve as core material having opposing first and second major
10 surfaces;

securing at least one face layer on at least one of the first and second major surfaces of the core material; and

15 cutting the core material and at least one face layer secured thereto into a plurality of wallboard or backerboard sheets.

32. A method according to Claim 31 further comprising joining a plurality of the cured sheets together in end-to-end relation while advancing the cured sheets along a path of travel.

33. A method according to Claim 32 wherein securing the at least one face layer is performed while the cured sheets are advanced along the path of travel.

34. A method according to Claim 31 securing the at least one face layer comprises securing first and second face layers on respective first and second major surfaces of the core material.

35. A method according to Claim 31 wherein the at least one face layer comprises paper.

36. A method according to Claim 31 wherein the at least one face layer is moisture-resistant.

37. A method according to Claim 31 further comprising forming the first major surface of the core material to have beveled portions adjacent respective opposing longitudinal side edges.

38. A method according to Claim 31 wherein securing the at least one face layer comprises securing

the at least one face layer to extend around the opposing longitudinal side edges.

39. A method according to Claim 31 further comprising adding reinforcing fibers to the aerated concrete.

40. A method for making wallboard or backerboard sheets comprising:

dispensing materials for making aerated concrete into a mold and allowing the materials to rise
5 and stiffen into a body;

dividing the body into a plurality of uncured sheets having opposing first and second major surfaces to serve as the core material;

securing at least one face layer on at least
10 one of the first and second major surfaces of the core material;

cutting the core material and at least one face layer secured thereto into a plurality of uncured wallboard or backerboard sheets; and

15 curing the uncured wallboard or backerboard sheets.

41. A method according to Claim 40 wherein the at least one face layer comprises first and second face layers on respective first and second major surfaces of the core material.

42. A method according to Claim 40 wherein the at least one face layer comprises paper.

43. A method according to Claim 40 wherein the at least one face layer is moisture-resistant.

44. A method according to Claim 40 further comprising forming the first major surface of the core material to have beveled portions adjacent respective opposing longitudinal side edges.

45. A method according to Claim 40 wherein the at least one face layer extends around the opposing longitudinal side edges.

46. A method according to Claim 40 further comprising adding reinforcing fibers to the aerated concrete.

47. A method for making wallboard or backerboard sheets comprising:

mixing and dispensing materials for making aerated concrete adjacent at least one face layer

5 advancing along a path of travel;

permitting the aerated concrete materials to rise and stiffen to define core material having first and second opposing surfaces with the at least one face layer secured thereto;

10 cutting the core material and at least one face layer secured thereto into a plurality of uncured wallboard or backerboard sheets; and

curing the uncured wallboard or backerboard sheets.

48. A method according to Claim 47 wherein the at least one face layer comprises first and second face layers on respective first and second major surfaces of the core material.

49. A method according to Claim 47 wherein the at least one face layer comprises paper.

50. A method according to Claim 47 wherein the at least one face layer is moisture-resistant.

51. A method according to Claim 47 further comprising forming the first major surface of the core material to have beveled portions adjacent respective opposing longitudinal side edges.

52. A method according to Claim 47 wherein the at least one face layer extends around the opposing longitudinal side edges.

53. A method according to Claim 47 further comprising adding reinforcing fibers to the aerated concrete.

54. A method for making at least one of a wallboard or backerboard sheet comprising:

forming a core having opposing first and second major surfaces and at least one face layer
5 thereon, said core comprising aerated concrete.

55. A method according to Claim 54 wherein the at least one face layer comprises first and second face layers on respective first and second major surfaces of the core.

56. A method according to Claim 54 wherein the at least one face layer comprises paper.

57. A method according to Claim 54 wherein the at least one face layer is moisture-resistant.

58. A method according to Claim 54 wherein the core has a generally rectangular shape defining a

pair of opposing side edges and a pair of opposing end edges.

59. A method according to Claim 58 wherein the first major surface has beveled portions adjacent respective opposing side edges.

60. A method according to Claim 58 wherein the at least one face layer extends around the opposing side edges.